

LAND MOLLUSCA OF A RUDERAL FIELD COMMUNITY IN NORTH CENTRAL ALABAMA

BY ALLAN F. ARCHER

In connection with ecological work done in the interests of the Department of Conservation of Alabama I had occasion to make observations and collections at Muscoda, Jefferson County, Alabama. This locality is of peculiar interest as illustrating an optimum type of molluscan assemblage in open country.

The locality is a low mountain range of rather submature topography lying within the industrial district of Bessemer and adjacent to the Birmingham District. In this area the range has been totally deforested, and has remained treeless at least half a century. The timber was cut during the earlier days of iron-ore mining. Today it presents an aspect of open fields with many thickets of shrubs and very young trees. Grassland predominates here, and the thickets are of only minor value to local animal life. There is not a single feature that is suggestive of the former forest cover, although there are similar mountain ranges in north central Alabama that are in forest. The timber of this locality was sacrificed to the necessities of mining, and has not been allowed to stage a comeback. Portions of the slope are scarred with deep pits, and there is a minor amount of gully-ing. Cattle and rabbits constitute the more conspicuous mammals of the locality.

The local soil is very red and of a clay-sand constituency. It is decomposed from sandstone of the Red Mountain formation. It is fairly rich in lime, in fact so rich that the iron ore mined from the area is self-fluxing. Because of the richness of the soil it is not surprising that a vigorous mollusk fauna should be present, rather in contrast with the few species found in ruderal fields in the Piedmont and Coastal Plain of Alabama. The local association with limestone is not at all surprising when we consider that Muscoda is located in the Appalachian Valley Physiographic Province.

The grassland which covers four-fifths of the ground surface forms a good, consistent, erosion-resistant sod. However, the grasses and ground plants exist in tufts (characteristic of the

warm temperate zone) in contrast with the tough, crowded sod of some open fields in the northern United States. The vegetation is of weedy character and is roughly as follows: Grasses, particularly *Andropogon* and *Panicum*, annual weeds, ferns (rare), *Rhus copallina* (frequent), *Toxicodendron radicans*, *T. toxicodendron*, *Lonicera japonica*, *Vitis rotundifolia*, *Smilax glauca*?, *Platanus occidentalis* (out of place ecologically, but characteristic of fields), *Liquidambar styracifolia*, *Hicoria alba*, *Quercus velutina*, *Pinus echinata* (rare). All the arboreal species exist in scattered thickets, are only a few feet high and about the size of the sumac. Rocks and stones are scattered over the area, but are not utilized as shelter by the snails.

Of interest as indicators of open-land conditions are some of the following spiders recorded from the locality: *Xysticus audax* Hentz, *Theridion differens* Emerton, *Latrodectus mactans* Fabricius, *Leucauge venusta* Walekenaer, *Cyclosa turbinata* Walekenaer, *Neoscona minima* Cambridge.

The following Mollusca were found:

1. *Philomycus carolinianus* Bose. Under rotten wood in grass. 1 specimen.
2. *Deroceras laeve gracile* Rafinesque. Crawling on grass. 1 specimen.
3. *Retinella cryptomphala* form *solida* H. B. Baker. Under leaves on borders of thickets. 2 specimens.
4. *Mesomphix pilsbryi* Clapp. Base down in soil, either under leaves of thickets or in dense grass. 11 specimens.
5. *Polygyra plicata* Say. Under leaves or plant trash close to thickets or in thickets; also at bases of grass tufts. 8 specimens.
6. *Stenotrema stenotrema* "Férussac" Pfeiffer. Commonest in tufts of grass, concentrated in the vicinity of a gully, but scattered thinly elsewhere; also in leaves at border of thickets. 18 specimens.
7. *Mesodon rugeli* Shuttleworth. Between leaf mold and bare soil in thickets, or in grass tufts in open areas. 12 specimens.
8. *Strobilops labyrinthica* Say. In thin leaf trash on lower border of a thicket. 1 specimen.
10. *Succinea avara* Say. Either in grass tufts or in leaf mold in thickets. 5 specimens.

11. *Olygyra orbiculata* Say. Especially common at borders of thickets in leaves. The immatures are quite hirsute. 8 specimens.

None of the species above listed are exceptional, but are quite apt to be found in open country in various parts of the state. The two least likely to be found are the *Philomycus* and the *Strobilops*. Most of the species are rather small and of xerophilous propensities. The only large one in the list is *Mesomphix pilsbryi* which occurs in open country in Alabama and Georgia. It is the commonest *Mesomphix* in the city of Montgomery.

MOLLUSKS FROM POINT ISABEL IN TEXAS

BY H. B. STENZEL

Many malacologists have pointed out that very little is known concerning the distribution of marine mollusks along the coasts of Texas and adjoining Mexico. In order to further our knowledge of the distribution, a list of mollusks from Point Isabel is given below. Point Isabel is in Cameron County, Texas, near the southernmost tip of the State on the shore of the Gulf of Mexico. It lies on the delta of the Rio Grande.

The collection was made by members of the Bureau of Economic Geology. The preservation is very poor because the collection was made on the beach. However, according to Dr. H. A. Pilsbry, it is perfectly adequate to establish distribution. Identifications were made by Mr. William T. Clarke, Jr., and R. A. McLean, of the Academy of Natural Sciences of Philadelphia. The writer wishes to express his thanks to these gentlemen.

Gastropoda

<i>Bulla occidentalis</i> Adams	<i>Strombus pugilis alatus</i> Gmel.
<i>Polinices duplicata</i> Say	<i>Semicassis gibba</i> Gmel.
<i>Sinum perspectivum</i> Say	<i>Murex flavescens</i> Sowb.
<i>Crepidula fornicata</i> L.	<i>Thais floridana</i> Conrad
<i>Architectonica granulata</i> Lam.	<i>Busycon perversum</i> L.
<i>Littorina irrorata</i> Say	<i>Busycon pyrum</i> Dillw.

Pelecypoda

<i>Nuculana acuta</i> Conr.	<i>Arca chemnitzii</i> Phil.
<i>Arca campechiensis</i> Gmel.	<i>Arca transversa</i> Say